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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/709,006	04/07/2004	Hung-Jen Huang	12530-US-PA	3005
31561	7590	05/04/2007		EXAMINER
JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE				MOTSINGER, SEAN T
7 FLOOR-1, NO. 100			ART UNIT	PAPER NUMBER
ROOSEVELT ROAD, SECTION 2				
TAIPEI, 100			2624	
TAIWAN				
			NOTIFICATION DATE	DELIVERY MODE
			05/04/2007	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

<b>Office Action Summary</b>	<b>Application No.</b> 10/709,006	<b>Applicant(s)</b> HUANG ET AL.
	<b>Examiner</b> Sean Motsinger	<b>Art Unit</b> 2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### **Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 4/7/2004.

2a)  This action is **FINAL**.                    2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## **Disposition of Claims**

4)  Claim(s) 1-12 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5)  Claim(s) \_\_\_\_\_ is/are allowed.  
6)  Claim(s) 1-12 is/are rejected.  
7)  Claim(s) \_\_\_\_\_ is/are objected to.  
8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 07 April 2004 is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO/SB/08)  
    Paper No(s)/Mail Date .  
  
4)  Interview Summary (PTO-413)  
    Paper No(s)/Mail Date. \_\_\_\_\_.  
5)  Notice of Informal Patent Application  
6)  Other: \_\_\_\_\_.  
  
7)  Other: \_\_\_\_\_  
    Paper No(s)/Mail Date \_\_\_\_\_.

***Objections to the Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the elements of method claims 7-12 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.
  
2. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Rejections Under 35 U.S.C. 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-2 and 7-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Chau US 5,596,369.
  
4. Re claim 1 Chau discloses an image decompressing circuit, comprising: a variable length decoding unit (VLD see figure 2 58), for receiving a compressed image picture (coded bit stream see figure 2 column 2 line 56-57) and executing a debug analysis (handling of errors column 2 line 5) on the compressed image picture (macro blocks column 2 line 4), wherein when a result of the debug analysis indicates that the compressed image picture is suitable for a subsequent decoding operation (if there is no error it is decoded column 2 lines 5-6), executing a decoding process in pipeline (column 3 line 27) on the compressed image picture; and an image picture recovery unit (everything after the VLD see figure 2), electrically coupled to the variable length decoding unit (note it is clearly electrically coupled see figure 2), for performing an inverse quantization (see element 14 figure 2 column 2 line 59), an inverse discrete cosine transformation (see element 16 figure 2 column

2 line 60) and a motion compensation (column 3 lines 28-29) with a pipeline process (column 3 line 27) after the compressed image picture has been decoded with the pipeline process (column 3 line 27), so as to recover the compressed image picture.

5. Re claim 2 Chau further discloses wherein when the variable length decoding unit performs the debug analysis on the compressed image picture and finds no error data, the compressed image picture is determined suitable for the subsequent decoding operation (column 2 lines 4-6 note decoding is continued if there is not error it is not continued if there is an error)
6. Re claim 7 Chau discloses A method of decompressing images, comprising:  
receiving a compressed image picture (coded bit stream see figure 2 column 2 line 56-57); executing a debug analysis on the compressed image picture (handling of errors column 2 line 5), wherein when a result of the debug analysis indicates that the compressed image picture is suitable for a subsequent decoding operation (if there is no error it is decoded column 2 lines 5-6), executing a decoding operation on the compressed image picture with a pipeline process (column 3 line 27) ; and performing an inverse quantization, an inverse discrete cosine transformation(see element 14 figure 2 column 2 line 59) and a motion compensation with a pipeline process after the compressed image picture has been decoded with the pipeline process, so as to recover the compressed image picture.

7. Re claims 7 and 8 these claims are the method preformed by the apparatus in claims 1 and 2 respectively and are likewise rejected. (See rejections for claims 1 and 2).

***Rejections Under 35 U.S.C. 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 3, 4, 9, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chau in view of Richter et al US 5,995,491.

9. Re claim 3 Chau discloses all the elements of claim 1, Chau does not disclose wherein when the variable length decoding unit performs the debug analysis on the compressed image picture and finds an error data, the compressed image picture is reloaded, so as to perform the debug analysis on the compressed image picture again. Richter discloses wherein when the debug analysis on the data finds an error data (error is detected column 8 lines 44), the data is reloaded (retransmitted column 8 lines 46), so as to perform the debug analysis on the data again. The motivation to combine is not retransmitting data which will arrive too late" (column 8 lines 47-52).

Therefore it is obvious to combine Chau and Richter to reach the aforementioned advantage.

10. Re claim 4 Chau discloses all of the elements of claim 1 Chau does not disclose wherein when the variable length decoding unit performs the debug analysis on the compressed image picture and finds more than a predetermined number of the error data and there is no sufficient time to reload the compressed image picture, the compressed image picture is aborted. Richter discloses wherein when the variable length decoding unit performs the debug analysis on the data and finds more than a predetermined number of the error data (note if there is any error it is flagged column 8 lines 40-45) and there is no sufficient time to reload the compressed data (column 8 lines 45-50), the compressed data is aborted (ignored column 8 lines 45-50). The motivation to combine is not retransmitting data which will arrive too late" (column 8 lines 47-52). Therefore it is obvious to combine Chau and Richter to reach the aforementioned advantage.
11. Re claims 9 and 10 these claims are the method preformed by the apparatus in claims 3 and 4 respectively and are likewise rejected. (See rejections for claims 3 and 4).
12. Claims 5 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chau and Richter in further view of Kramer et al US 6,658,027.

13. Re claim 5 Chau discloses all of the elements of claim 1. Chau does not disclose wherein when the variable length decoding unit performs the debug analysis on the compressed image picture and finds less than a predetermined number of the error data and there is no sufficient time to reload the compressed image picture, the compressed image picture is determined suitable for the subsequent decoding operation.
14. Richter discloses checking to see if there is sufficient time to reload the compressed data (column 8 lines 45-50) combinable for the reasons stated above.
15. Kramer discloses when the debug analysis finds less than a predetermined number (high water mark column 11 lines 35-40) of the error data the compressed image picture (frame column 11 lines 35-40) is determined suitable for the subsequent decoding operation (contains enough relevant information to warrant playback column 11 lines 35-40)
16. Re claims 11 this claims is the method preformed by the apparatus in claim 5 and is likewise rejected. (See rejection for claim 5).
17. Claims 6 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chau in view of Lavallee et al US 5,267,242.

18. Re claim 6 Chau discloses all of the elements of claim 1 Chu does not disclose wherein the variable length decoding unit can selectively turn on or turn off the debug analysis (ECC logic column 5 lines 5-10) function for the compressed image picture. Lavallee discloses selectively turn on or turn off (column 5 lines 5-10) the debug analysis function for the data. The motivation to combine is that "the ECC logic can be enable or disabled" (ee column 5 lines 5-10).

19. Re claim 12 this claims is the method preformed by the apparatus in claim 5 and is likewise rejected. (See rejection for claim 6).

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean Motsinger whose telephone number is 571-270-1237. The examiner can normally be reached on 9-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jingge Wu can be reached on (571)272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Motsinger  
4/25/2007

  
JINGGE WU  
SUPERVISORY PATENT EXAMINER